## **ABSTRACT**

Provided are porous fibers and fiber structures that have large surface areas and large voids, and controlled hydrophilicity suitable for matrices of cell culture in the field of tissue engineering, and a method for producing the fiber structure including a step in which a solution is produced by dissolving a hydrophobic solvent-soluble polymer and an organic compound having a plurality of hydroxyl groups in a hydrophobic solvent, a step in which the solution is spun by electrospinning, and a step in which a fiber structure accumulated on a collector is obtained.